

# ANNUAL REPORT

OF THE

# BRIDGE DEPARTMENT

OF THE

CITY OF BOSTON



FOR THE YEAR ENDING JANUARY 31, 1907.

Nº 6358.76 Breton. Bridge Defortment





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# BRIDGE DEPARTMENT

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CITY OF BOSTON

FOR THE

YEAR ENDING JANUARY 31, 1907

Compliments of

Patrick F. McDonald,

Superintendent.

BOSTON BOSTON OFFICE

Pouron. Dudge Department.

VALUATION NAME OF STREET O

926, 927 AND 928 TREMONT BUILDING, BOSTON, February 1, 1907.

Hon. John F. Fitzgerald,

Mayor of the City of Boston:

DEAR SIR,—I respectfully submit herewith the annual report of the expenditures, income and operations of the Bridge Department, including the Boston and Cambridge bridges, for the financial year ending January 31, 1907.

There are in the City of Boston 159 bridges, not including culverts. Seven of these, namely, Harvard, West Boston (temporary), Prison Point, Cambridge street, Essex street, Western avenue to Cambridge, and North Harvard street, all connecting Boston and Cambridge, are in charge of two commissioners, one of whom is appointed by the Mayor of the City of Boston and the other by the Mayor of the City of Cambridge. One, Craigie's, from Boston to Cambridge, is in charge of the Charles River Basin Commission, and will be replaced by the Charles River dam, now under construction.

One hundred fifteen bridges are supported wholly or in part by the City of Boston, twenty-seven of these being tidewater bridges provided with a draw.

Forty-two bridges are supported wholly by railroad corporations.

There are thirteen important tide-water bridges maintained by the City of Boston, namely, Mt. Washington avenue, operated by hand power; Broadway, Chelsea South, Congress street, L street and Warren, operated by steam power; and Charlestown, Chelsea North, Dorchester avenue (formerly Federal street), Dover street, Malden, Meridian street and Summer street, operated by electricity.

Repairs have been made on the different bridges at various times; the operating machinery on the draw-bridges has been frequently inspected and such repairs made as were needed, and the surface and structures of the different inland bridges have received attention from time to time as the necessity arose, and all defects promptly and properly remedied.

The bridges of Boston are growing old, and require more than the ordinary attention; almost all of them need painting, the fences and iron work are in poor condition, and the appropriation does not permit much more than the regular repairs to the wearing surface of the bridges.

I would respectfully recommend that an addition of 10 per cent. to the regular appropriation be made for the next five years, in order that the structures and iron work of the various bridges may be given proper attention.

During the year I have given permission to the Boston Elevated Railway Company to strengthen, at their own expense, for their heavy cars, the Boylston street, Columbus avenue, Massachusetts avenue, Meridian street and Malden bridges; also to rebuild the Chelsea-street bridge. The amount expended by the Boston Elevated Railway Company on the above bridges was \$78,040.89.

I would respectfully call your attention to the badly corroded condition of the Huntington-avenue bridge, over the Boston & Albany railroad. From an inspection made by the City Engineer it was fully demonstrated that public safety demands that an appropriation be made during the coming year to rebuild it as soon as possible. According to an estimate made by the City Engineer this would cost about \$35,000.

I would also call your attention to the poor condition of Congress-street bridge. The floor of the fixed portion of the bridge is rotten, is continually giving out, is dangerous, and should be renewed at once.

The City Engineer estimates the cost of the necessary repairs at \$23,000.

The present condition of the above two bridges demand that two special appropriations, amounting to \$58,000, be made at once in the interest of public safety.

### Respectfully submitted,

Patrick F. McDonald, Superintendent and Bridge Commissioner.

### STATEMENT OF EXPENDITURES.

### Administration.

Office expenses:								
Salaries, superintend	lent	and	oflice f	force			\$6,728	80
Salaries, supervisors							3,608	
Telephones, office,		ls ar	nd sur	erin	tendei	ıt's		
house	•		, , ,				954	98
Printing							742	09
Stationery .							446	65
Printing Stationery . Advertising .							174	55
Furniture .							211	33
Travelling expenses			. 0				25	00
Total expended, a	dmii	nistra	tion				\$12,192	35
MA	INT	ENAN	ce Ex	PENSI	ES.			
Administration .							\$12,192	35
On tide-water bridges	•	•	•	•	•			
On inland bridges	•	•	·	•	•		13,528	
On Boston and Cambrid	doe doe	bride	res				11,609	
North yard and stable	age	OTICE	500	•			8,047	
South yard and stable			·		•		12,521	
Total							\$199,845	19
FINAN	VCI.	A L	STA	— ГЕМ	ENT	7.		
Appropriation, 1906-07	7						\$201.000	00
Received from the Box	ston	& A	lbany	Rail	road 1	$\operatorname{for}$	¥201,000	00
work done Received from the Old	Cal		Doiles		p106	51		
Company for work do	001	ony	Kanwa	iy	200	00		
Company for work (to	ne			•	300		406	37
Total							\$201,406	37

Amount of exp	enditures	from	Febru	ıary	1,-1906,		
to January 31							
Transfer to the	Sanitary !	Depart	tment	٠		1,561	18
Total .						\$201,406	

# Special Appropriations in Charge of the Bridge Department.

NAME OF APPROPRIATION.	Appropriation and Balances.	Expended Feb. 1, 1906, to Jan. 31, 1907.	Balance on hand Jan. 31, 1907.
Chelsea bridge, south draw, reconstruction of	\$15,000 00	\$12,655 04	\$2,344 96
Congress-street bridge, repairs	107 58	107 58	
*Cottage-street bridge, reconstruction of	2,325 04	1,904 25	
Dover-street bridge, widening of draw opening	7,609 59	6,248 13	1,361 46
Totals	\$25,042 21	\$20,915 00	\$3,706 42

Amount of January Transferre	31, 1	907					\$20,915	00
ment			_				420	79
Balance							3,706	42
							\$25,042	21
Amount cl							\$427	80
Amount e	iation						\$199,845	19
ment sp				_		-	20,915	00
Grand 190							\$220,760	19

### INCOME.

The amount of bills deposited with the City Collector during the year was \$1,817.47, and the amount received by the City Collector on account of the Bridge Department during the same period was \$1,798.22.

The following is a list of the amounts expended on the different bridges in charge of this department:

TIDE-WATER BRIDGES.

NAME OF BRIDGE.	Repairs: Labor and Material.	Regular Expenses: Salaries, Fuel and Supplies.	Total.
Broadway Draw	\$1,451 74	\$8,346 04	\$9,797 78
Charlestown	3,698 68	11,199 73	14,898 41
Chelsea, north Draw	2,121 72	8,189 85	10,311 57
Chelsea, south Draw	908 14	8,271 18	9,179 32
Chelsea street	922 32	334 98	1,257 30
Commercial Point (or Tenean)	26 51	50 00	76 51
Congress street	3,171 44	8,285 95	11,457 39
Dorchester avenue	2,733 89	7,969 48	10,703 37
Dover street	2,892 61	7,872 82	10,765 43
Granite	294 73	240 85	535 58
L street	1,192 98	9,065 38	10,258 36
Malden	483 88	7,877 56	8,361 44
Meridian street	2,493 96	7,813 48	10,307 44
Mt. Washington avenue	68 12	7,114 65	7,182 77
Neponset	1,949 63	419 84	2,369 47
North Beacon street	124 43	199 41	323 84
Summer street	1,512 42	8,371 93	9,884 35
Warren	1,559 52	8,963 48	10,523 00
Western avenue (to Watertown)	205 53	218 48	424 01
Winthrop	320 83	137 50	458 33
Public Landings:			
East Boston	5 00	412 50	417 50
Jeffries Point		350 00	350 00
Sundry Expenditures		2,102 07	2,102 07
Totals	\$28,138 08	\$113,807 16	\$141,945 24

BOSTON AND CAMBRIDGE BRIDGES.

Classification of expenditures by the City of Boston from February 1, 1906, to January 31, 1907, which is one-half of the cost of the cale of these bridges, the other half being paid by the City of Cambridge.

							1		
OBJECT OF EXPENDITURES.	Cambridge Street.	Essex Street.	Harvard.	North Harvard Street.	Prison Point.	West Boston.	Western Avenue.	General Account.	Totals.
Drawtenders Lumber. Electric light. General repairs. Gleaning bridges Fuel Tools and hardware Paint and painting. Iron-work. Clerical services Printing Stationery.	\$827 14 98 43 98 44 47 00 44 44 12 14 12 14 2 30 2 30	\$277 14	\$1,835 01 461 19 1,180 00 262 08 408 63 8 40 22 29 5 38 34 46	\$513 92 73 23 74 44 84 44 1 98 1 98 35	\$513 92 \$1,507 16 \$1,944 82 73 23 \$34 44 55 581 28 8 2 44 54 1 50 1 14 2 22 32 2 05 3 76 1 50 1 14 15 22 32 2 05 3 76 1 50 3 76 4 54 18 75	\$1,944 82 581 28 253 62 22 32 1 50 1 50	\$897 13 67 55 47 00 30 63 3 23 3 23 15 94	\$164 58 34 41 8 255 30	\$7,802 32 1,855 28 1,855 28 47 44 44 94 44 94 164 58 164 5
rotals	\$1,042 86	\$277 14	\$277 14 \$4,251 65	\$625 97	\$1,528 27	\$625 97 \$1,528 27 \$2,822 29 \$1,061 46	\$1,061 46	\$207 54	\$11,817 18

### INLAND BRIDGES.

Name of Bridge.	Repairs, Labor and Materials.
Albany street	\$43 28
Allston	3,056 33
Ashmont	17 24
Athens street	7 41
Baker street	40 86
Beacon street (Fens)	1 38
Beacon street (over Boston & Albany Railroad)	72 55
Berkeley street	844 62
Blakemore street	146 04 411 91
Boston street.	46 99
Boylston street (over Boston & Albany Railroad)	310 08
Broadway (over Boston & Albany Railroad)	306 39
Brookline avenue	1,393 41
Central avenue	534 31
Columbus avenue	255 57
Cortage street (foot-bridge)	877 85
Dartmouth street	111 48
Dorchester avenue	82 12
Elmwood street	11 56
Everett street	134 04
florence street	2 50
Gardner street	73 55
Gold street	$\begin{array}{cccc} & 2 & 25 \\ & 102 & 51 \end{array}$
Keyes street	51 81
Leyden street	49 06
Linden Park street	143 62
Massachusetts avenue (over Boston & Albany Railroad),	499 89
Massachusetts avenue (over N. Y., N. H. & H. R.R.)	245 23
Milton	6 56
Norfolk street (south)	305 04
Dakland street	124 92
Southampton street (west)	275 45
Southampton street (over railroad)	95 92
West Fourth street	854 88
Vest Newton street	187 21
Villiams street	10 78 1,792 14
undry expenditures	1,192 14
Total expenditures on inland bridges	\$13,528 74
MAINTENANCE EXPENSES AT THE NORTH AND SOU	TH YARDS
District No. 1, Warren Bridge.	ZANDO.
North Yard and stable	\$8,047
District No. 2, 168-170 Broadway Extens	ion.
South Yard and stable	\$12,521

### LIST OF BOSTON BRIDGES.

### I. - BRIDGES WHOLLY MAINTAINED BY BOSTON.

[In the list those marked with an asterisk (\*) are over navigable waters, and are each provided with a draw.]

### In Charge of Bridge Department.

Allston, over Boston & Albany Railroad at Cambridge street, Brighton.

Ashland street, over N. Y., N. H. & H. Railroad, Providence Division, West Roxbury.

Athens street, over N. Y., N. H. & H. Railroad, Midland Division.

Baker street, at Brook Farm, West Roxbury. Beacon street, over outlet to Back Bay Fens. Beacon street, over Boston & Albany Railroad.

Bennington street, over Boston, Revere Beach & Lynn Railroad.

Berkeley street, over Boston & Albany Railroad. Berwick park (foot-bridge), over N. Y., N. H. & H. Railroad,

Providence Division.

Blakemore street, over N. Y., N. H. & H. Railroad, Providence

Division.

Bolton street, over N. Y., N H. & H. Railroad, Midland

Division.
Boylston street, over Boston & Albany Railroad.

\* Broadway, over Fort Point Channel.

Broadway, over Boston & Albany Railroad.

Brookline avenue, over Boston & Albany Railroad.

Brooks-street bridge, Brighton.

Byron street, over Boston, Revere Beach & Lynn Railroad.

Charlesgate, over Ipswich street.

\* Charlestown, from Boston to Charlestown.

\* Chelsea [South], over south channel, Mystic river.

\* Chelsea street, from East Boston to Chelsea.

Columbus avenue, over Boston & Albany Railroad.

\* Commercial Point, or Tenean, Dorchester.
\* Congress street, over Fort Point channel.

Cottage Farm, over Boston & Albany Railroad, at Commonwealth avenue.

Cottage street (foot-bridge), over flats, East Boston. Dartmouth street, over Boston & Albany Railroad.

\* Dorchester avenue (formerly Federal street), over Fort Point channel.

\* Dover street, over Fort Point channel.

Elmwood street (private way), over Stony brook, Roxbury.

Ferdinand street, over Boston & Albany Railroad. Florence street, over Stony brook, West Roxbury.

Gainsborough street (foot-bridge), over N. Y., N. H. & H.

Railroad, Providence Division.

Gold street (foot-bridge), over N. Y., N. H. & H. Railroad, Midland Division.

Huntington avenue, over Boston & Albany Railroad.

Hyde Park avenue, over Stony brook, West Roxbury.

Ipswich street, over waterway.

Irvington street (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.

Keyes street, over Stony brook, West Roxbury.

\* L street, over reserved channel at junction of Summer and L streets.

Linden Park, over Stony brook, Roxbury.
\* Malden, from Charlestown to Everett.

Massachusetts avenue, over Boston & Albany Railroad.

Massachusetts avenue, over N. Y., N. H. & H. Railroad, Providence Division.

\* Meridian street, from East Boston to Chelsea.

\* Mt. Washington avenue, over Fort Point channel.

Shawmut avenue, over Boston & Albany and N. Y., N. H. & H. Railroad, Providence Division.

Southampton street, east of N. Y., N. H. & H. Railroad, Midland Division.

Southampton street, west of N. Y., N. H. & H. Railroad, Midland Division.

Summer street, over A street.

Summer street, over B street.

Summer street, over C street.

\* Summer street, over Fort Point channel.

\* Warren, from Boston to Charlestown.

West Newton street, over N. Y., N. H. & H. Railroad, Providence Division.

West Rutland square (foot-bridge), over N. Y., N. H. & H. - Railroad, Providence Division.

Williams street, over Stony brook, West Roxbury.

Winthrop, from Breed's Island to Winthrop.

### In Charge of Park Department.

Agassiz, in Fens.

Audubon, in Riverway, over Boston & Albany Railroad.

Bernier-street foot-bridge, over Muddy river.

Boylston, in Fens, over waterway.

Bridle-path, in Riverway, over Muddy river.

\* Castle Island, in Marine Park, South Boston, to Castle Island. Charlesgate, in Fens, over Boston & Albany Railroad.

Commonwealth avenue, in Fens, over waterway.

Ellicott Arch, in Franklin Park.

Fen, in Fens.

Forest Hills, in Franklin Park.

Leverett pond (foot), in Leverett Park.

Neptune, in Wood Island Park, over Boston, Revere Beach & Lynn Railroad.

Overlook Arch, in Franklin Park.
Scarboro', in Franklin Park.
Scarboro' pond (foot), in Franklin Park.
Stony brook, in Arborway.
Stony brook, in Fens.
Wood Island (foot), in Wood Island Park.

In Charge of Public Grounds Department.

Public Garden (foot-bridge).

II. — BRIDGES OF WHICH BOSTON MAINTAINS THE PART WITHIN ITS LIMITS.

### In Charge of Bridge Department.

Central avenue, from Dorchester to Milton.

\* Chelsea [North], from Charlestown to Chelsea.

\* Granite, from Dorchester to Milton. Milton, from Dorchester to Milton.

\* Neponset, from Dorchester to Quincy.

\* North Beacon street, from Brighton to Watertown. Spring street, from West Roxbury to Dedham.

\* Western avenue, from Brighton to Watertown.

### In Charge of Park Department.

Bellevue, in the Riverway, over Muddy river. Bernier-street foot-bridge, over Muddy river. Brookline avenue, in the Riverway, over Muddy river. Huntington avenue, in the Riverway, over Muddy river. Longwood, in the Riverway, over Muddy river.

III. — Bridges of which Boston Pays a Part of the cost of Maintenance.

### In Charge of Bridge Department.

Albany street, over Boston & Albany Railroad (over freight tracks).

Ashmont, junction Dorchester avenue and Talbot avenue, over N. Y., N. H. & H. Railroad, Plymouth Division (75 feet south of northerly end).

Harvard street, over N. Y., N. H. & H. Railroad, Midland Division (sidewalks).

### In Charge of Commissioners of Cambridge Bridges.

- \* Cambridge street, from Brighton to Cambridge.
- \* Essex street, from Brighton to Cambridge.

\* Harvard, from Boston to Cambridge.

\* North Harvard street, from Brighton to Cambridge.

\* Prison Point, from Charlestown to Cambridge.

\* West Boston (temporary), from Boston to Cambridge.

\* Western avenue, from Brighton to Cambridge.

# IV. — Bridges of which Boston Maintains the Wearing Surface.

### In Charge of Bridge Department.

Blue Hill avenue, over N. Y., N. H. & H. Railroad, Midland Division.

Boston street, over N. Y., N. H. & H. Railroad, Plymouth Division.

Cambridge street, over Boston & Maine Railroad.

Chelsea bridge, over Boston & Maine Railroad.

Dorchester avenue, over N. Y., N. H. & H. Railroad, Plymouth Division.

Everett street, over Boston & Albany Railroad, Brighton.

Norfolk street, over N. Y., N. H. & H. Railroad, Midland Division, Mattapan.

Oakland street, over N. Y., N. H. & H. Railroad, Midland Division, Mattapan.

Perkins street (foot-bridge), over Boston & Maine Railroad.

Summer street, over N. Y., N. H. & H. Railroad, Midland Division.

Southampton street, over N. Y., N. H. & H. Railroad, Plymouth Division.

West Fourth street, over N. Y., N. H. & H. Railroad, Plymouth Division.

### In Charge of Bridge and Park Departments.

Columbia road, over N. Y., N. H. & H. Railroad, Plymouth Division.

Columbia road, over Shoreham street.

V.— Bridge Maintained by Charles River Basin Commission. Craigie's, Boston to Cambridge.

VI.—Bridge Maintained by Metropolitan Park Commission. Mattapan bridge.

### VII .- BRIDGES MAINTAINED BY RAILROAD CORPORATIONS.

### 1st.—Boston & Albany Railroad.

Albany street (over passenger tracks).

Harrison avenue.

Market street, Brighton.

Tremont street.

Washington street.

2d. - Boston & Maine and Boston & Albany Railroads.

Main street.

Mystic avenue.

3d. — Boston & Maine Railroad, Eastern Division.

Wauwatosa avenue, East Boston.

4th. — Boston, Revere Beach & Lynn Railroad.

Everett street.

5th. — New York, New Haven & Hartford Railroad, Midland Division.

Dorchester avenue.

Morton street, Dorchester.

Norfolk street, Dorchester (near Dorchester station).

Silver street.

Washington street, Dorchester.

West Broadway.

West Fifth street.

West Fourth street.

West Second street.

West Sixth street.

West Third street.

6th. — New York, New Haven & Hartford Railroad, Plymouth Division.

Adams street.

Cedar Grove Cemetery.

Freeport street.

Medway street.

Savin Hill avenue.

7th. — New York, New Haven & Hartford Railroad, Providence Division.

Albany street. New part.

Beech street, West Roxbury.

Bellevue street, West Roxbury.

Berkeley street. New part.

Broadway. New part.

Canterbury street, West Roxbury.

Castle street.

Centre and Mt. Vernon streets, West Roxbury.

Chandler street.

Columbus avenue. New part.

Dartmouth street. New part.

Dudley avenue, West Roxbury.

Ferdinand street. New part.

Harrison avenue. New part. Park street, West Roxbury. Tremont street. New part. Washington street. New part.

## RECAPITULATION OF BRIDGES.

I.			
	In charge of Bridge Department	58	
	In charge of Park Department	19	
	In charge of Public Grounds Department,	1	
	•	_	78
II.	Number of which Boston maintains the part		
	within its limits:		
	In charge of Bridge Department	8	
	In charge of Park Department	5	
	and seeming a series of series and series of series and series of		13
III.	Number of which Boston pays a part of the		
	cost of maintenance:	•	
	In charge of Bridge Department	3	
	In charge of Commissioners of Boston and		
	Cambridge Bridges	7	
	Cambridge Dridges	•	10
IV	Number of which Boston maintains the wearing		10
14.	surface:		
	In charge of Bridge Department	12	
		$\frac{12}{2}$	
	In charge of Bridge and Park Departments,	Z	1.4
*7	No. b		14
V.	Number maintained by Charles River Basin		
XYY	Commission	•	1
VI.	Number maintained by Metropolitan Park		
	Commission		1
VII.	Number maintained by railroad corporations:		
	1. Boston & Albany	5	
	2. Boston & Maine and Boston & Albany		
	Railroads	2	
	3. Boston & Maine, Eastern Division .	1	
	4. Boston, Revere Beach & Lynn	1	
	5. New York, New Haven & Hartford,		
	Midland Division	11	
	6. New York, New Haven & Hartford,		
	Plymouth Division	5	
	7. New York, New Haven & Hartford,		
	Providence Division	17	
		_	42
Total	number		159
	P.	-	

per year.

### PUBLIC LANDING-PLACES.

The following public landing-places have been built by the city, and are maintained and controlled by the Bridge Division:

East Boston Public Landing.—Size, 18×30. Built in 1893. Moored at dock of Howe's Wharf. Dock leased at \$350

Jeffries Point, East Boston. — Size, 20 × 50. Moored from

Fitzpatrick's Wharf; \$350 per year.

### CABLE-HOUSES AND BOXES.

The following is a list of cable-houses and boxes on bridges in charge of this department:

New England Telephone and Telegraph Company:

Chelsea [South] bridge, 1 house.
Congress-street bridge, 2 houses.
Dover-street bridge, 2 houses or boxes.
Chelsea [North] bridge, 1 box.
Chelsea-street bridge, 1 box.
Malden bridge, 4 boxes.
Meridian-street bridge, 2 boxes.
Neponset bridge, 2 boxes on poles.
Warren bridge, 2 boxes.

American Telephone and Telegraph Company:

Dorchester-avenue bridge, 1 house.

Mt. Washington-avenue bridge, 2 boxes.

Neponset bridge, 1 box on pole. Summer-street bridge, 1 box.

Merchants' Telegraph Company: Congress-street bridge, 2 boxes.

Postal Telegraph Cable Company: Congress-street bridge, 2 houses. Malden bridge, 2 boxes. Warren bridge, 2 boxes.

Boston Electric Light Company: Congress-street bridge, 2 boxes.

Lynn & Boston Railroad Company: Chelsea [North] bridge, 4 boxes. Chelsea [South] bridge, 8 boxes.

Boston Elevated Railway Company:
Cambridge-street bridge, 1 house.
Dover-street bridge, 1 house, 1 box.
Dorchester-avenue bridge, 2 houses.
Malden bridge, 2 houses.
Warren bridge, 2 houses.

Boston Police Department: Chelsea [South] bridge, 1 box. Malden bridge, 2 boxes. Boston Fire Department:

Chelsea [North] bridge, 1 box.

Dover-street bridge, 1 house, 1 box.

Meridian-street bridge, 2 boxes.

Warren bridge, 2 boxes.

LAND AND BUILDINGS IN CHARGE OF BRIDGE DEPARTMENT.

Broadway Bridge.—Draw-house and one storehouse. Land, Broadway and Dorchester avenue, containing 5,516 feet, on which is a brick stable and workshop.

Charlestown Bridge. Draw-house, electrical power-room, and

six storehouses.

Chelsea [North] Bridge.— Draw-house.
Chelsea [South] Bridge.— Draw-house and engine-house.

Chelsea-street Bridge.— Tool-house.

Congress-street Bridge.—Draw-house, storehouse and two shelter houses.

Cottage-street (foot-bridge). - Watchman's house.

Dover-street Bridge.— Draw-house.

Dorchester-avenue Bridge. — Draw-house, tool-shed, two motorhouses, one controller-house.

L-street Bridge.— Draw-house, engine-house.

Malden Bridge. - Draw-house.

Meridian-street Bridge. - Draw-house.

Mt. Washington-avenue Bridge. - Draw-house and tool-house. Neponset Bridge.—Tool-house.

Summer-street Bridge. — Draw-house, controller-house, two shelter houses.

Warren Bridge. - Stable, draw-house, containing an engineroom and boiler-room and a tool-house.

Western-avenue Bridge to Watertown. — Tool-house.

List of Small Bridges or Culverts having Wooden Tops, which are Repaired by Bridge Department. - Walls Repaired and Openings Cleaned by Sewer Department.

Length. Side Walls. Covering.
h. Side
Lengt
Height of Opening.
Span.
LOCATION.

Table showing Width of Bridges, kind of Roadways, Sidewalks, etc., on Tide-water Bridges, 1906.

	dge.	R	OADWAY.		SII	DEWALKS.
NAME OF BRIDGE,	Width of Bridge	Width.	Kind of Roadway.	Number.	Width.	Kind of Walks.
	Ft. In.	Ft. In.			Ft. In.	
Broadway	60 0	40 0	Plank	2	10 0	Coal-tar concrete.
Cambridge street	40 0	32 9	"	1	6 0	Plank.
Craigie's (temporary).	49 2	40 0	"	1	8 0	66
Charlestown	100 0	$\begin{bmatrix} 127 & 9 \\ 122 & 0 \\ 127 & 9 \end{bmatrix}$	"	2	10 0	Asphalt.
Chelsea, North	49 0	40 0	46	1	8 0	Coal-tar concrete and plank.
Chelsea, South	50 3	41 2	"	1	8 0	Plank.
Chelsea street	30 0	23 2	44	1	6 0	"
Commercial point {	about .34 0	about 27 0	} "			
Congress street	60 0	44 0	Paved	2	8 0	Coal-tar concrete.
Dover st. (over water)	60 0	40 0	٠٠٠٠٠٠	2	10 0	Asphalt.
Essex street	31 0	22 8	Plank	1	7 6	Plank.
Federal street	69 0	49 0	Paved	2	10 0	Asphalt.
Granite	30 2	24 4	Plank	1	5 0	Plank.
Harvard	69 4	51 0	"	2	9 2	Asphalt.
L street	60 0	44 0	Paved	2	8 0	66
Malden	$   \left\{     \begin{array}{c}       60 & 0 \\       to \\       67 & 6     \end{array}   \right\} $	44 0	٠٠٠٠٠٠	2	8 0	Composition.
Meridian street	50 0	36 0	"	2	7 0	Coal-tar concrete.
Mt. Washington ave	61 0	39 6	"	2	10 9	66 66
Neponset	30 0	23 10	Plank	1	5 5	Plank.
North Beacon street	31 0	25 2	"	1	5 0	"
North Harvard street.	28 2	26 7	"			
Prison Point	50 0	36 0	{ Plank part } Paved part }	2	7 0	Coal-tar concrete.
Summer street	100 0	76 0	Paved	* 2	12 0	Asphalt.
Warren	80 0	60 0	٠٠٠٠٠٠	2	10 0	Coal-tar concrete.
Western avenue to Cambridge	33 2	26 3	Plank	1	6 0	Plank.
Western avenue to Watertown	33 0	24 2	"	1	8 0	66
Winthrop	24 2	19 10	"	1	3 7	"
West Boston (temporary)	47 2	37 2	" ,	1	10 0	"

Table showing the Widths of Openings for Vessels in all Bridges Provided with Draws in the City of Boston, 1906.

Boston & Maine R.R., Eastern Division							
Division	Name of Bridge.	Location.	Number of Openings.		17	'idt	h.
Division		Boston to Charlestown		39	fee	t 8	inches
Division	Boston & Maine R.R., Eastern Division	Over Miller's river	1	35	"	10	"
Division (for teaming freight).   Boston & Maine R.R. (freight), Southern Division.   Boston & Maine R.R. (passenger), Southern Division.     1   39 " 8 "   10 "   10   10   10   10   10   10		Boston to Charlestown	1	36	**	7	"
Southern Division         Boston & Maine R.R. (passenger), Southern Division         " " " 1 39 " 8 "           Boston & Maine R.R., Western Division         " " " 1 39 " 8 "           Boston & Maine R.R., Western Division         Boston to Charlestown         1 39 " 8 "           Boston & Maine R.R., Western Division         Over Miller's river         1 36 " 0 "           Boston & Maine R.R., Western Division         Over Miller's river         1 36 " 0 "           Broadway         Over Fort Point channel         1 42 " 7 "           Cambridge street         Brighton to Cambridge         1 36 " 4 "           Charlestown (main channel)         Boston to Charlestown         2 50 " 0 "           Charlestown (north channel)         " " 49 " 9 "           Chelsea (south channel)         " " 1 60 " 0 "           Chelsea (south channel)         " " 1 60 " 0 "           Chelsea street (East Boston side),         East Boston to Chelsea         2 36 " 0 "           Chelsea street (Chelsea side)         " " 36 " 0 "           Commercial Point (or Tenean)         Dorchester         1 24 " 2 "           Congress street         Boston to East Cambridge         1 36 " 0 "           Craigle's (temporary)         Boston to East Cambridge         1 36 " 0 "           Dover street         " " 1 40 " 0 "           East Boston	Boston & Maine R.R., Fitchburg Division (for teaming freight)	" " …	1	36	"	7	"
Boston & Maine R.R., Western Division		Boston to East Cambridge,	1	39	66	10	"
Boston & Maine R.R., Western Division	Boston & Maine R.R. (passenger), Southern Division	" " …	1	39	"	8	"
Division         Over Miller's river.         1         36         0           Broadway         Over Fort Point channel.         1         42         7         "           Cambridge street         Brighton to Cambridge         1         36         "         4         "           Charlestown (main channel)         "         "         49         "         9         "           Charlestown (north channel)         "         "         49         "         9         "           Chelsea (south channel)         "         "         1         60         "         9         "           Chelsea (north channel)         "         "         1         60         "         0         "           Chelsea street (East Boston side),         "         "         1         60         "         "         "         36         "         0         "           Commercial Point (or Tenean)         Dorchester         1         24         "         2         43         "         "         "         24         "         "         "         Congress street (Boston side)         Over Fort Point channel         2         43         "         "         "         1	Boston & Maine R.R., Western	Boston to Charlestown	1	39	"	8	"
Cambridge street         Brighton to Cambridge         1         36 " 4 "           Charlestown (main channel)         Boston to Charlestown         2         50 " 0 "           Charlestown (north channel)         " "		Over Miller's river	1	36	"	U	"
Cambridge street       Brighton to Cambridge       1       36 " 4 "         Charlestown (main channel)       Boston to Charlestown       2       50 " 0 "         Charlestown (north channel)       " "	Broadway	Over Fort Point channel	1	42	"	7	**
Charlestown (main channel)       Boston to Charlestown       2       50 " 0 "         Charlestown (north channel)       " "		Brighton to Cambridge	1	36	"	4	46
Charlestown (north channel)       " " "		Boston to Charlestown	2	50	"	0	**
Chelsea (south channel)       Charlestown to Chelsea       1       38 " 9 "         Chelsea (north channel)       " " " 1       60 " 0 "         Chelsea street (East Boston side)       East Boston to Chelsea       2 36 " 0 "         Chelsea street (Chelsea side)       " " " 36 " 0 "         Commercial Point (or Tenean)       Dorchester       1 24 " 2 "         Congress street (Boston side)       Over Fort Point channel       2 43 " 3 "         Congress street       " " " " 50 " 0 "         Craigie's (temporary)       Boston to East Cambridge       1 36 " 0 "         Dorchester avenue       Over Fort Point channel       1 41 " 4 "         Dover street       " " " 1 40 " 0 "         Essex street       Brighton to Cambridge       1 36 " 0 "         Grand Junction R.R.       East Boston to Chelsea       1 49 " 0 "         Granite       Dorchester to Milton       1 36 " 0 "         Harvard (Boston side)       Boston to Cambridge       2 36 " 6 "         Harvard (Cambridge side)       " " 36 " 10 "         L street       Over Reserved channel       1 39 " 8 "		" " …		49	"	9	"
Chelsea (north channel)       " " " 1 60 " 0 "         Chelsea street (East Boston side),       East Boston to Chelsea.       2 36 " 0 "         Chelsea street (Chelsea side)       " " 36 " 0 "         Commercial Point (or Tenean)       Dorchester       1 24 " 2 "         Congress street (Boston side)       Over Fort Point channel       2 43 " 3 "         Congress street       " " " " 50 " 0 "         Craigie's (temporary)       Boston to East Cambridge       1 36 " 0 "         Dorchester avenue       Over Fort Point channel       1 41 " 4 "         Dover street       " " " 1 40 " 0 "         Essex street       Brighton to Cambridge       1 36 " 0 "         Grand Junction R.R.       East Boston to Chelsea       1 49 " 0 "         Granite       Dorchester to Milton       1 36 " 0 "         Harvard (Boston side)       Boston to Cambridge       2 36 " 6 "         Harvard (Cambridge side)       " " 36 " 10 "         L street       Over Reserved channel       1 39 " 8 "		Charlestown to Chelsea	1	38	"	9	"
Chelsea street (East Boston side),       East Boston to Chelsea.       2       36 " 0 "         Chelsea street (Chelsea side)       " " " " 24 " 2 "         Commercial Point (or Tenean)       Over Fort Point channel       2 43 " 3 "         Congress street (Boston side)       Over Fort Point channel       2 43 " 3 "         Congress street       " " " " " 50 " 0 "         Craigle's (temporary)       Boston to East Cambridge       1 36 " 0 "         Dorchester avenue       Over Fort Point channel       1 41 " 4 "         Dover street       " " " 1 40 " 0 "         Essex street       Brighton to Cambridge       1 36 " 0 "         Grand Junction R.R       East Boston to Chelsea       1 49 " 0 "         Granite       Dorchester to Milton       1 36 " 0 "         Harvard (Boston side)       Boston to Cambridge       2 36 " 6 "         Harvard (Cambridge side)       " " 36 " 10 "         L street       Over Reserved channel, South Boston       1 39 " 8 "		"	1	60	"	0	"
Commercial Point (or Tenean)       Dorchester       1       24       "       2       "       "       "       3       "       "       "       3       "       "       "       "       3       "       "       "       "       3       "       "       "       "       3       "		East Boston to Chelsea	2	36	"	0	66
Commercial Point (or Tenean)       Dorchester       1       24 " 2 "         Congress street (Boston side)       Over Fort Point channel       2       43 " 3 "         Congress street       " " " " 50 " 0 "         Craigle's (temporary)       Boston to East Cambridge       1       36 " 0 "         Dorchester avenue       Over Fort Point channel       1       41 " 4 "         Dover street       " " " 1 40 " 0 "         Essex street       Brighton to Cambridge       1       36 " 0 "         Grand Junction R.R.       " " " 1 40 " 0 "         Grandte       Dorchester to Milton       1       36 " 0 "         Harvard (Boston side)       Boston to Cambridge       2       36 " 6 "         Harvard (Cambridge side)       " " 36 " 10 "         L. street       Over Reserved channel       1       39 " 8 "	Chelsea street (Chelsea side)	" " …		36	"	0	"
Congress street		Dorchester	1	24	"	2	**
Congress street	Congress street (Boston side)	Over Fort Point channel	. 2	43	"	3	**
Dorchester avenue   Over Fort Point channel   1   41 " 4 "				50	66	0	44
Dorchester avenue         Over Fort Point channel         1         41 " 4 "           Dover street         " " " " 1         40 " 0 "           Essex street         Brighton to Cambridge         1         36 " 0 "           Grand Junction R.R         " " 1 40 " 0 "         40 " 0 "           Grand Junction R.R         East Boston to Chelsea         1         49 " 0 "           Granite         Dorchester to Milton         1         36 " 0 "           Harvard (Boston side).         Boston to Cambridge         2         36 " 6 "           Harvard (Cambridge side).         " " 36 " 10 "         "           L street         Over Reserved channel, South Boston         1         39 " 8 "	Craigie's (temporary)	Boston to East Cambridge.	1	36	"	0	**
Essex street Brighton to Cambridge 1 36 " 0 "  Grand Junction R.R " " 1 40 " 0 "  Grand Junction R.R East Boston to Chelsea 1 49 " 0 "  Granite Dorchester to Milton 1 36 " 0 "  Harvard (Boston side) Boston to Cambridge 2 36 " 6 "  Harvard (Cambridge side). " " 36 " 10 "  L street Over Reserved channel, South Boston 1 39 " 8 "		Over Fort Point channel	1	41	"	4	**
Essex street	Dover street		1	40	"	0	**
Grand Junction R.R.       East Boston to Chelsea       1       49       0       "         Granite.       Dorchester to Milton       1       36       "       0       "         Harvard (Boston side).       Boston to Cambridge       2       36       "       6       "         Harvard (Cambridge side).       "         36       "       10       "         L street.       Over Reserved channel, South Boston.       1       39       "       8       "		Brighton to Cambridge	1	36	66	0	"
Grand Junction R.R.       East Boston to Chelsea       1       49 " 0 "         Granite       Dorchester to Milton       1       36 " 0 "         Harvard (Boston side).       Boston to Cambridge       2       36 " 6 "         Harvard (Cambridge side).       " "       36 " 10 "         L street       Over Reserved channel, South Boston       1       39 " 8 "	Grand Junction R.R	" " …	1	40	"	0	**
Harvard (Boston side)   Boston to Cambridge   2   36 " 6 "     Harvard (Cambridge side)   " "   36 " 10 "     L. street   Over Reserved channel, South Boston   1   39 " 8 "		East Boston to Chelsea	1	49	66	0	"
Harvard (Cambridge side)	Granite	Dorchester to Milton	1	36	66	0	**
Harvard (Cambridge side)       " "	Harvard (Boston side)	Boston to Cambridge	2	36	"	6	66
L street Over Reserved channel, South Boston 1 39 " 8 "		" "		36	66	10	66
Malden Charlestown to Everett 1 50 " 0 "			1	39	66	8	46
	Malden	Charlestown to Everett	1	50	"	0	"

### Table showing Width of Openings, etc. — Concluded.

NAME OF BRIDGE.	Location.	Number of Openings.		W	idtl	1.
Meridian st. (East Boston side)	East Boston to Chelsea	2	59	feet	2	inches
Meridian street (Chelsea side)			59	6.6	0	"
Mt. Washington avenue (Boston side)	Over Fort Point channel	2	42	"	2	"
Mt. Washington avenue (South Boston side)			52	"	0	"
Neponset	Dorchester to Quincy	2	-36	66	0	"
New York, New Haven & Hartford R.R	Over South Bay	1	28	66	4	"
New York, New Haven & Hartford R.R., Y-connection	Over Fort Point channel	1	41	44	11	"
New York, New Haven & Hart- ford R.R	" " " …		42	"	0	"
New York, New Haven & Hartford R.R	Dorchester to Quincy	1	51	6.6	0	"
North Beacon street	Brighton to Watertown	1	30	"	0	"
North Harvard street	Brighton to Cambridge	1	36	66	0	"
Prison Point	Charlestown to Cambridge,	1	35	"	8	"
Summer street	Over Fort Point channel	1	50	"	0	66
Warren	Boston to Charlestown	1	36	"	0	"
West Boston (temporary)	Boston to Cambridge	1	36	"	0	"
Western avenue	Brighton to Cambridge	1	36	"	0	"
Western avenue	Brighton to Watertown	1	35	"	10	"

# DRAWTENDERS' REPORTS.\*

Giving Number of Vessels Passing through Drawbridges Controlled by the City of Boston from February 1, 1902, to January 31, 1907, Inclusive.

reb. l,	Total, 1902, t	37,874 95,240 63,031 63,031 63,088 34,259 34,259 1,758 1,758 1,816 1,	549,773
ll .	.9061	6,834 8,316 931 10,044 7,155 6,107 7,887 7,887 7,887 7,887 12,621 12,621 7,887 7,887 12,621 1	104,183
VESSELS	.8061	7,320 10,627 10,627 10,630 10,736 6,736 6,736 12,740 9,144 110,818 6,453	113,699
BER OF	.4061	6,766 6,766 11,583 7,837 151 9,788 6,938 6,938 6,938 11,389 11,389 8,578 8,578 5,773 5,773	102,175
TOTAL NUMBER	.8081	7,7,797 7,486 114,012 7,420 2,000 111,304 7,534 2,595 11,184 10,635 3,55 11,184 10,635 6,000 6,000	112,422
TOTA	.2061	9,157 12,817 12,817 6,631 4,72 13,160 13,160 10,405 11,765 11,765 11,765 6,065 6,065	117,294
	.9061	2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2	29,596
SRS.	1905.	1,798 4,092 4,092 4,092 1,987 1,847 1,847 1,847 1,847 1,987 1,987 1,999 1,09 1,0	31,939
ALL OTHERS.	1904	1,732 2,139 3,331 2,917 1,742	29,049
ALI	1903.	2, 2, 1935 1, 1938 1,	32,123
	.2061	2,400 1,907 3,826 2,086 2,086 1,968 1,968 1,031 3,332 3,332 1,624	32,336
	.9061	4,1738 8,1038 6,487 8,717 8,487 8,254 1,339 1,339 1,518 1,51	64,617
	1909	4,239 3,969 8,074 6,082 6,927 6,927 1,662 1,662 1,662 5,759 2,70 2,70 2,70 3,572 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0	69,705
Tugs.	1904	3,7578 17,191 1,191 1,484 1,484 1,484 1,484 1,319 1,31	62,105
	.8081	4,359 4,203 3,396 3,396 6,984 4,641 1,835 1,835 6,057 6,057 8,939 1,158	67,529
	.2061	5,1766 17,786 17,786 18,787 18,787 18,787 19	69,122
	19061	995 688 688 372 372 11 1,136 987 987 941 120 276 948 40 11,131 1,131 1,131	9,279
SELS.	1902	1,279 761 791 791 791 791 1,222 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,223 1,23	11,443 9,279
SAILING VESSELS	1904.	1,163 680 680 680 680 1,315 1,060 1,205 1,	10,469
SAILIN	1903.	1,208 1,083 1,083 1,083 1,442 1,208 1,059 1,208 1,208 1,208 1,208 1,208 1,208 1,208 1,050	11,996
	.2061	1,586 1,265 1,265 1,266 1,559 1,559 1,390 1,709 1,709 1,709 1,112	15,055
l só	.9061	287. 287. 287. 100. 388. 888. 888. 100.	691
STEAMERS.	19061	4 ::12:22 	5 615
EA	1904.	4 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 55
ST	19081	6 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	12
	NAME OF BRIDGE.	Broadway   6   2   4	Totals 781 774 555 612

\*Cambridge, Cambridge street, Brookline street, North Harvard street, Western avenue to Cambridge, Prison Point, and Harvard bridges are not included in this table, being in care of Commissioners representing the two cities (Boston and Cambridge) connected by these bridges.

DRAWTENDERS' REPORTS.\*

Giving Number of Vessels Passing through the Drawbridges controlled by the City of Boston from February 1, 1906, to January 31, 1907, Inclusive.

umber enings.		2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2	9 48,352
umber rgoes.	Total X	1,845.3 1,845.3 1,845.3 1,132.8 1,132.8 1,132.8 1,533.1 1,533.	18,159
SER OF	Total.	6,596 11,948 8,316 8,316 10,044 1,063 1,063 1,084 1,087 1,087 1,087 1,090 1,00 1,0	104,183
TOTAL NUMBER VESSELS.	By Night.	1,024 1,339 1,339 1,339 1,336 850 850 850 850 850 850 850 850 850 850	14,636
TOTA	By Day.	5,810 10,636 1,686 1,686 8,119 1,875 10,380 10,380 11,380 11,78 11	89,547
cks.	Total.	1,798 2,255 3,181 3,181 1,87 1,87 1,87 1,87 1,87 1,87 1,87	29,596
ALL OTHERS.	By Night.	2669 270 270 270 270 270 270 270 270 270 270	4,315
AL	isy Day.	1,529 1,539 1,539 1,539 1,539 1,536	25,281
	Total.	2,000 2,000	64,617
Tugs.	By Night.	610 769 859 886 880 880 110 1129 1129 1129 1129 1129 1139 1139 1139	8,998
	By Day.	3,405 3,090 6,869 4,379 4,337 3,571 3,156 3,088 3,088 1,1420 1,1420 1,1420 1,1420 1,1420 1,1420 1,1600 1,000	55,619
SELS.	Total.	995 688 688 720 772 372 11,131 987 987 987 217 217 40 40 40 659	9,279
SAILING VESSELS	By Night.	135 160 277 157 157 122 122 122 122 122 108 16 16 16 16 17 18	1,999
SAILI	By Day.	866 528 698 8698 857 11 118 118 118 118 118 118 118 118 118	8,057
ož.	Total.	28. 28. 28. 28. 28. 28. 28. 28. 28. 28.	691
STEAMERS.	By Night.	25. 10 12 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	101
ST	By Day.	96 292 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	290
Bridge.		Brondway Charlestown Charlestown Chelsea (Yoorth) Chelsea street Congress street Dover street Granite Astreet Marden Meridian street Mount Watten North Beacon street North Beacon street Warren Warren Warren Western avenue	Totals

\* Cambridge, Cambridge street, Brookline street, North Harvard street, Western avenue to Cambridge, Prison Point and Harvard bridges are not included in this table, being in care of Commissioners representing the two cities (Boston and Cambridge) connected by these bridges. † Bridge open.

Number of Times the Draws on the Boston and Cambridge Bridges have been Opened and the Number of Vessels which have Passed Through for the Year Beginning February 1, 1906, and Ending January 31, 1907.

	CAMBRIDG	CAMBRIDGE STREET.	HARVARD	ARD.	NORTH HAR STREET	NORTH HARVARD STREET.	PRISON POINT	POINT.	WEST 1	West Boston.	WES	WESTERN AVENUE.
DATE.	Yamber openings.	Xumber of vessels pass- ing through.	Yumber of draw openings.	Number of vessels passuing through.	Xumber of draw openings.	Xumber of vessels pass- ing through.	Xumber of draw openings.	Xumber of vessels pass- ing through.	Xumber of draw openings.	Number of vessels pass- ing through.	Yamber of draw openings.	Yumber of vessels pass- fug through.
February	9	6.	45	106	9	6	10	쭚	62	148	9	6
March	96	45	129	437	16	56	21	38	308	713	16	26
A pril	10	15	132	452	00	12	25	67	322	892	00	12
May	13	19	81	387	12	19	26	62	197	546	112	19
June	24	38	81	203	12	18	36	104	143	267	12	18
Tuly	16	58	35	28	14	56	27	89	62	133	15	27
August	œ	77	27	45	œ	14	25	54	126	252	00	14
September	10	17	22	31	10	17	85	69	298	705	10	. 17
October	17	30	861	45	9	œ	26	09	377	938	9	00
November	19	33	41	99	19	32	43	95	189	1,294	19	32
December	4	9	20	63	4	9	55	27	100	201	4	9
January, 1907	10	17	21	25	4	L-	30	117	*	*	4	t-
Totals	162	270	689	1,915	119	194	323	875	2,576	6,089	120	195
					ì							

\* West Boston bridge closed December 8, 1906.







